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S/N: 10/707,352

In the Claims

1. (Currently Amended) A plasma cutting torch comprising:
a torch body;
an output electrode disposed in the torch body; and
a plasma cutter starting circuit disposed in the torch body and configured
to generate a pilot arc signal and deliver the pilot arc signal to at the output electrode to
cause generation of a pilot arc.
2. (Currently Amended) The plasma cutting torch of claim 1 further
comprising a cutting trigger, wherein the pilot arc signal generated by the plasma cutter
starting circuit is configured to transfer a high-frequency, high-voltage power transferred
to the output electrode of the plasma cutting torch upon activation of the cutting trigger.
3. (Currently Amended) The plasma cutting torch of claim 1 wherein output
electrode of the plasma cutting torch is configured to receive high-frequency power to
cause generation of a the pilot arc across an airgap to a workpiece.
4. (Original) The plasma cutting torch of claim 1 wherein the torch body
includes a handle and wherein the plasma cutter starting circuit is disposed within the
handle.
5. (Original) The plasma cutting torch of claim 1 wherein the plasma cutter
starting circuit is configured to supply a high-frequency, high-voltage power to the output
electrode independent of a starting configuration of a plasma cutter power source to
which the torch is connected.
6. (Original) The plasma cutting torch of claim 5 wherein a distance
between the output electrode and the plasma cutter starter circuit is less than 12 inches.

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7. (Original) The plasma cutting torch of claim 1 wherein the plasma cutter starting circuit is disposed within a manually controlled plasma cutting torch.

8. (Original) The plasma cutting torch of claim 1 wherein the starting circuit is further configured such that noise radiation from the plasma cutter starting circuit is negligible.

9. (Original) The plasma cutting torch of claim 1 wherein the plasma cutting torch is operable with a power source configured for a contact start plasma cutter.

10. (Original) The plasma cutting torch of claim 1 wherein the plasma cutter starting circuit is disposed within a robotic plasma cutting torch.

11. (Original) The plasma cutting torch of claim 1 wherein the starting circuit is further configured to generate the pilot arc at the output electrode to ionize gas and initiate generation of a plasma.

12. (Currently Amended) A manufacturing kit comprising:
a plasma cutting torch having an anode and a cathode and configured to operatively engage a power source; and
a pilot arc starting circuit positioned in the plasma cutting torch and configured to supply the plasma cutting torch with a pilot arc voltage necessary to generate a pilot arc between the anode and the cathode of the plasma cutting torch~~independent of a starting configuration of the power source.~~

13. (Currently Amended) The manufacturing kit of claim 12 wherein the pilot arc voltage is generated independent of a starting configuration of the power source~~starting circuit is disposed within the plasma cutting torch.~~

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14. (Currently Amended) The manufacturing kit of claim ~~12~~13 wherein the starting configuration of the power source is a contact start starting configuration.

15. (Currently Amended) The manufacturing kit of claim 12 wherein at least one of the anode and cathode further comprising-comprise an output electrode and wherein the pilot arc starting circuit is configured to supply a high-frequency, high-voltage, low-current power to the output electrode to initiate plasma cutting.

16. (Currently Amended) A plasma cutting assembly comprising:
a power source;
a plasma cutting torch; and
a starter circuit disposed within the plasma cutting torch and configured to generate sufficient power to cause a pilot arc in the plasma cutting torch~~supply the plasma cutting torch with a pilot arc independent of a starting mechanism of the power source.~~

17. (Original) The plasma cutting assembly of claim 16 wherein the power source is configured for a contact start plasma cutter.

18. (Original) The plasma cutting assembly of claim 16 wherein the starter circuit is configured to supply a high-frequency, high-voltage, low-current power to generate the pilot arc.

19. (Original) The plasma cutting assembly of claim 16 wherein the starter circuit is disposed within a handle of the plasma cutting torch.

20. (Original) The plasma cutting assembly of claim 16 having an open circuit output voltage of greater than 230 Volts Direct Current.